## Ex. 09 Evans Rebuttal Opinion Summaries

## I. Introduction, Assignment and Summary of Opinions on Opening Reports by Apple's Experts

- 1. My name is David S. Evans. I submitted an opening expert report in this matter. It addressed the relevant markets for examining Apple's app distribution and payment processing restrictions and whether Apple's restrictions harmed competition and consumers in those relevant markets.<sup>1</sup>
- 2. Counsel for Epic has asked me to examine the expert reports, submitted on behalf of Apple, by Professors Hitt, Lafontaine, Rubinfeld, and Schmalensee, and assess whether they:
  - i. provide reliable economic analysis and evidence for assessing whether Apple's restrictions harmed competition and consumers in relevant antitrust markets; or
  - ii. cause me to modify or amend any of the opinions presented in my opening report.

Counsel has also asked me to examine Professor Hanssens' expert report insofar as it provides data that Professors Hitt and Lafontaine rely on. For brevity, I refer to Professors Hanssens, Hitt, Lafontaine, Rubinfeld, and Schmalensee as "Apple's experts." That I have not responded to all claims by those experts does not mean that I agree with them.

- 3. I have concluded that Apple's experts do not provide reliable economic analysis and evidence and that they do not cause me to change any opinions in my opening report, or to revise any of the economic analysis and evidence those opinions are based on.
- 4. Based on my review of the opening reports by Apple's experts, I have reached 21 principal opinions which I summarize below, divided into four main areas. This summary is not

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<sup>&</sup>lt;sup>1</sup> Expert Report of Dr. David S. Evans, February 16, 2021 ("Evans Report"). I incorporate herein Sections I.A and I.B of my opening report since they apply equally to this report. My qualifications and compensation are the same as those described in that report and my CV and list of testimony provided is unchanged.

intended to be exhaustive and the body of my report provides the full set of opinions and their support.

- 1. Opinions Regarding the Economic Guidance Provided by Professor Schmalensee for Analyzing Market Definition, Market Power and Competitive Effects for Two-Sided Transaction Platforms
- 5. Opinion R1.1: Despite referring to two-sided transaction platforms, and stating some basic principles derived from the economic literature, Professor Schmalensee (a) ignores or fails to apply those principles in drawing out the implications for the App Store being a two-sided transaction platform for the analysis of market definition, market power and competitive effects; (b) points to two-sided analysis being "complex" without providing any guidance for how to analyze antitrust issues for the App Store, the two-sided transaction platform at the heart of this case; and (c) therefore does not provide Professors Lafontaine and Hitt, who rely on his guidance, with a sound framework, based on the economics of two-sided platforms, for analyzing market definition, market power and competitive effects for the conduct at issue in this case.
- 6. Opinion R1.2: Professor Schmalensee does not provide a framework for defining product markets for two-sided transaction platforms, based on using the SSNIP test or any other economic method for assessing actual substitution, and Professors Lafontaine and Hitt do not consider a SSNIP test or any other economic measures of substitution in their analyses of market definition, which thereby makes their analyses uninformative on whether the alternatives they point to provide material competitive constraints for defining markets and assessing market power.

- 2. Opinions Regarding the Market Definition Methodology Proposed by Professor Lafontaine, the Market Definition Analysis Conducted by Professor Hitt, and the Relevance of the Survey Data Collected by Professor Hanssens
- 7. Opinion R2.1. The broad multiplatform game distribution market adopted by Apple's experts is not a valid antitrust market because it is based on a flawed methodology that is biased towards finding a broad market and that is not based on reliable economic evidence that users or developers would substitute to apps on other devices in the face of a small but significant increase in the price of iOS app distribution.
- 8. Opinion R2.2: The market definition methodology proposed by Professor Lafontaine, implemented by Professor Hitt, and endorsed by Professor Schmalensee, is unreliable as a matter of economics: (a) because it is centered on the customer that filed an antitrust case rather than the conduct at issue; (b) can thereby, nonsensically, lead to different market definitions for the same conduct and facts depending on which customer sued and whether the plaintiff is a customer, competitor or competition authority; and (c) because it focuses on the substitution possibilities for Epic as the plaintiff, and Fortnite as a particular product, rather than whether there would be sufficient switching by users and developers to constrain the competitive conduct at issue.
- 9. Opinion R2.3: Although Apple's experts claim that game users and developers could turn to "substitutes" for iOS app distribution: (a) they provide no material evidence that these substitutes are economically significant, or that users and developers would substitute to them in the face of a price increase, which is the relevant economic question; (b) virtually all of the quantitative evidence reported by Professor Hitt, and relied on by Professor Lafontaine, is incapable as an economic matter of showing whether consumers or developers would substitute

enough to constrain a price increase by a hypothetical monopolist of app distribution, for market definition, or by the App Store, in assessing its market power; and (c) Professor Hanssens' survey data are not capable of assessing whether or to what the extent users have significant substitutes for the Fortnite iOS app because his survey doesn't ask the relevant questions for an antitrust analysis and yields data that are patently unreliable.

- 10. Opinion R2:4: Professor Hitt's claim that the entry of Nintendo Switch shows evidence of substitution for iOS Fortnite app users is wrong because: (a) his methodology is not capable of measuring substitution and is equally consistent with Switch providing incremental usage and not replacing iOS usage; (b) only 5.1 percent of iOS Fortnite app users used a Switch device over the period he considers; and (c) a proper statistical analysis shows the 5.1 percent of iOS app users who did use a Switch shows that they did not reduce the time spent on the iOS Fortnite app relative to those who did not, but instead used the Switch as a complementary device.
- 11. Opinion R2:5: Contrary to the claims concerning substitution by Professors Hanssens, Hitt, and Lafontaine, econometric analysis of substitution that took place following Apple's removal of Fortnite's iOS app, with associated severe degradation for existing users of the app, shows that the preponderance of consumers who only played Fortnite on their iOS devices did not switch to playing Fortnite on other devices and that not enough iOS app users would switch to other devices to constrain the App Store's exercise of market power over Epic as a developer.
- 12. Opinion R2:6: Professors Hitt's and Lafontaine's conclusions regarding the App Store's market power are wrong and irrelevant because they are not based on a relevant antitrust market defined by identifying and measuring competitive constraints and not based on any

economic analysis capable of determining whether users or developers could substitute in a sufficient amount to constrain the exercise of market power.

13. Opinion R2:7. Professor Lafontaine's dismissal of the possibility of anticompetitive concerns in an aftermarket for app distribution is predicated on her erroneously assumed broad multiplatform game distribution market, which is not based on evidence of substitution in the face of price increases or any other accepted economic method for defining markets.

## 3. Opinions Regarding Professor Schmalensee's Analysis of the "Potential Tie" between IAP and App Distribution

- 14. Opinion R3.1: Although Professor Schmalensee says, or appears to imply, that his finding that there is not a tie between IAP and app distribution follows inexorably from the fact that the App Store is a two-sided transaction platform, there is no logical economic connection between his finding and the fact that app stores are transactions platforms. His analysis, which is wrong for other reasons, would apply equally to single-sided retail businesses.
- 15. Opinion R3.2: Contrary to Professor Schmalensee, who bases his economic analysis of the "potential tie" on false analogies, Apple's IAP requirement is not like an art gallery or other brick-and-mortar stores using a payment terminal, and Apple's IAP is not like merchant acceptance of an American Express card.
- 16. Opinion R3.3: Professor Schmalensee's conclusion that there would not be separate demand for payment processing is (a) premised on Apple replacing a contractual tie between IAP and app distribution with a price tie, which has the same effect and would not obviate the need for an economic analysis of competitive effects; (b) ignores extensive evidence that there is separate demand for app distribution and payment solutions for in-app purchases; and (c)

- 17. Opinion R3.4: The fact that developers could consider business models in which they sell ads, or physical services, instead of digital content in-app, does not show that these alternatives provide any meaningful competitive constraint on Apple's ability to force developers of digital content apps into using IAP for in-app purchases as a condition of distribution by the App Store.
- 18. Opinion R3.5: Professor Schmalensee's review of the commission rates for "digital distribution platforms" does not show that Apple's IAP requirement is procompetitive because (a) he is wrong that a 30 percent commission for game retailers is standard because many game app stores charge less than 30 percent and because the fees charged by gaming console platforms are mainly for access to the platform rather than as a game retailer; and (b) he ignores the fact that direct distribution, which he acknowledges is common for other platforms in the absence of restrictions, dramatically reduces the cost of distribution for developers.
- 19. Opinion R3.6: Professor Schmalensee fails to account for significant differences between credit card networks and app stores in applying the American Express decision to his analysis of Apple's IAP requirement, including: (a) app stores face general competition from single-sided business, in the absence of prohibitions on direct distribution, unlike credit card networks, which only face competition from other two-sided credit card networks; (b) there is not a one-to-one relationship involving IAP and app distribution as there is between American Express cardholder and merchant use; and (c) the conduct at issue in *American Express*, which concerned anti-steering provisions but not a tie, was very different than this case, which

involves a tie between IAP and app distribution, where the anti-steering provisions are used to prevent developers from undoing that tie.

- 20. Opinion R3.7: Professor Schmalensee has not shown as a matter of economics that the App Store's payment processing restrictions result in procompetitive benefits that are material or that are attributable to those restrictions. Against these claimed benefits, I showed in my opening report that Apple's requirement that developers use Apple's IAP caused substantial harm to competition and consumers in the market for payment solutions for accepting and processing payments for digital content purchased with an iOS app. The anticompetitive harms flowing from Apple's restrictions requiring the use of its IAP payment solution substantially outweigh the procompetitive efficiencies claimed by Professor Schmalensee, which I do not find material in any event.
  - 4. Opinions Regarding Professor Rubinfeld's Arguments as to Why Apple's Conduct Should Not be Subject to Antitrust Scrutiny or Has Procompetitive Justifications
- 21. Opinion R4.1: As an economic matter, the sound analytical framework for assessing the conduct at issue in this case recognizes that (a) the challenged conduct involves Apple conditioning access to one product on the use of another; (b) that conduct can be assessed as an economic matter by defining markets, assessing market power, considering competitive effects, and evaluating procompetitive justifications as provided by the three-step rule of reason inquiry; and (c) the relevant but-for world for assessing efficiencies is one in which Apple can continue to offer its App Store, bundled with the iPhone, and offer IAP, so long as it does not exclude competition. That's the framework I employed in my opening report.
- 22. Opinion R4.2: Professor Rubinfeld's conclusion that the conduct in this case should not be subject to antitrust scrutiny is based on the incorrect premise that the challenged conduct is

an unconditional refusal to deal with Epic, when in fact the challenged conduct concerns Apple conditioning access to the iOS operating system, which it has chosen to make available to developers, on the exclusive use of its App Store.

- 23. Opinion R4.3: Professor Rubinfeld: (a) provides no economic evidence that Apple's elimination of alternative app distribution, or the payment processing restrictions resulting from its IAP requirement, are necessary for achieving any of the benefits he claims, or that those practices led to increased investment in app distribution, including by Apple, and therefore provides no evidence that these practices generate any material economic efficiencies; and (b) provides no economic evidence that Apple's exclusionary contractual restrictions are integral to procompetitive intellectual property licensing or should bar analysis of whether Apple's conduct is anticompetitive.
- 24. Opinion R4.4: Professor Rubinfeld does not show that, without a monopoly in iOS app distribution, Apple would face significant free-riding that would reduce its incentives to make investments or that other harms, to Apple, or the iOS-based ecosystem, would follow. He provides no economic analysis or evidence that free riding is a prevalent problem, including for Apple's macOS; that Apple's exclusionary conduct solves a free-riding problem; or that permitting competition in app distribution would cause a free-riding problem that is so prevalent as to hamper the development of the platform or diminish investment to sub-optimal levels. He presents a parade of "horribles" that he claims would happen as result of ending this monopoly but provides no material economic analysis or evidence to show his claimed scenarios would likely result, and the problems he claims would result are not consistent with the widespread use of competitive software distribution, including direct distribution, for personal computer operating systems, including macOS.

25. Opinion R4.5: Apple's app distribution restrictions impose substantial harm on iOS app users and developers through higher prices, lower quantity and quality of app distribution services, and lower investment and innovation in app distribution services. Professor Rubinfeld has not shown that that the benefits he claims are material, that they flow from the restrictions themselves as opposed to aspects of Apple's conduct that are not anticompetitive, or that Apple could not address any problems through measures less restrictive than blocking all other channels of app distribution. I therefore conclude that the anticompetitive harms flowing from Apple's app distribution restrictions substantially outweigh the procompetitive efficiencies, which I do not find material in any event.